

ADMINISTRATIVE CIVIL LIABILITY ORDER FOR

MORNING STAR PACKING COMPANY WILLIAMS FACILITY COLUSA COUNTY



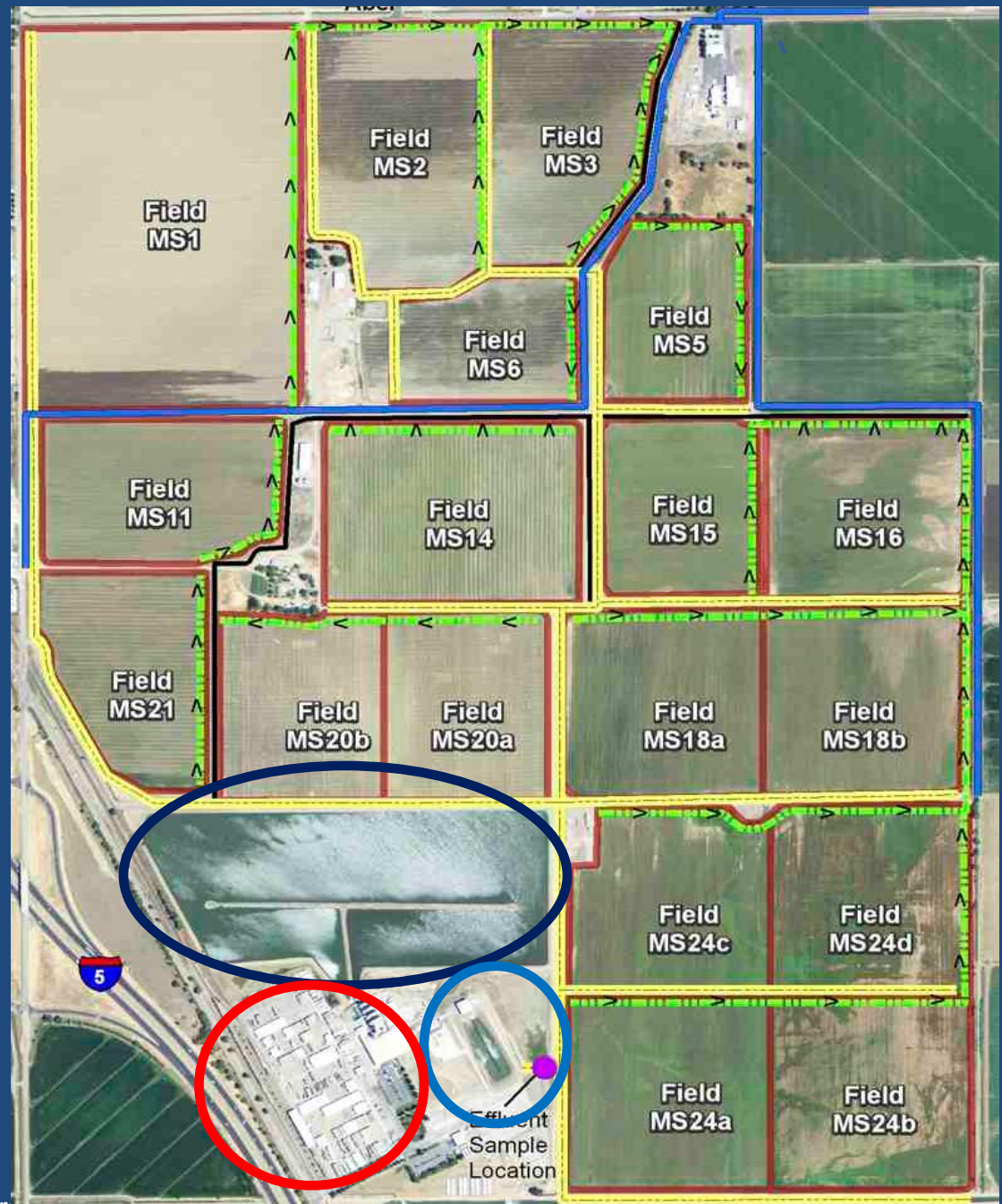
Big Picture

- Morning Star is an “industry leader”
- Tomato packing facility in Williams
- 1995: first WDRs
- 2005: CDO
- 2013: WDRs updated and CDO rescinded
- 2015: ACLC for most egregious violations: discharge of waste from unauthorized expansion of Cooling Pond and Settling Pond



Permitted Facility

- Processing area
- Settling Pond (tomato waste)
- Cooling Pond (high salinity and tomato waste)
- 695 acres of cropland



Issues for the Board to Consider

1. Did Morning Star violate its WDRs?
 - Prosecution Team: yes
 - Morning Star: no

2. If yes, what is the appropriate liability?
 - Prosecution Team: \$1.5 million
 - Morning Star: \$0

Expansion of Cooling Pond and Reduction in Cropland

- 2013 WDRs:
 - Cooling Pond is 60 acres
 - 695 acres of cropland
- Spring 2015:
 - Cooling Pond increased to 100 acres
 - 90 acres of cropland removed
- “Material change” and unauthorized discharged to groundwater
- Did not submit RWD. Flow limits based on more cropland and smaller pond.

Expansion of Cooling Pond

June 2015

July 2015



Expansion of the Settling Pond



- 1995 and 2013 WDRs say 5 acre-feet
- In 2012, doubled capacity to 10 ac-feet
- Increased discharge to groundwater
- Didn't submit RWD or disclose to staff
- Anti-degradation analysis based on smaller pond
- WDRs need updating

Alleged Violations of WDRs

- Standard Provision A.4:
Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board.
 - 2013 WDRs, Discharge Prohibition A.3:
Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
- Morning Star has violated its WDRs

Issues for the Board to Consider

1. Did Morning Star violate its WDRs?
2. If yes, what is the appropriate liability?

→ Calculated volume of wastewater discharged from expanded portions of ponds to groundwater

- Penalty calculation: \$14.8 million
- ACL Complaint: \$1.5 million
- MS: \$0

Morning Star

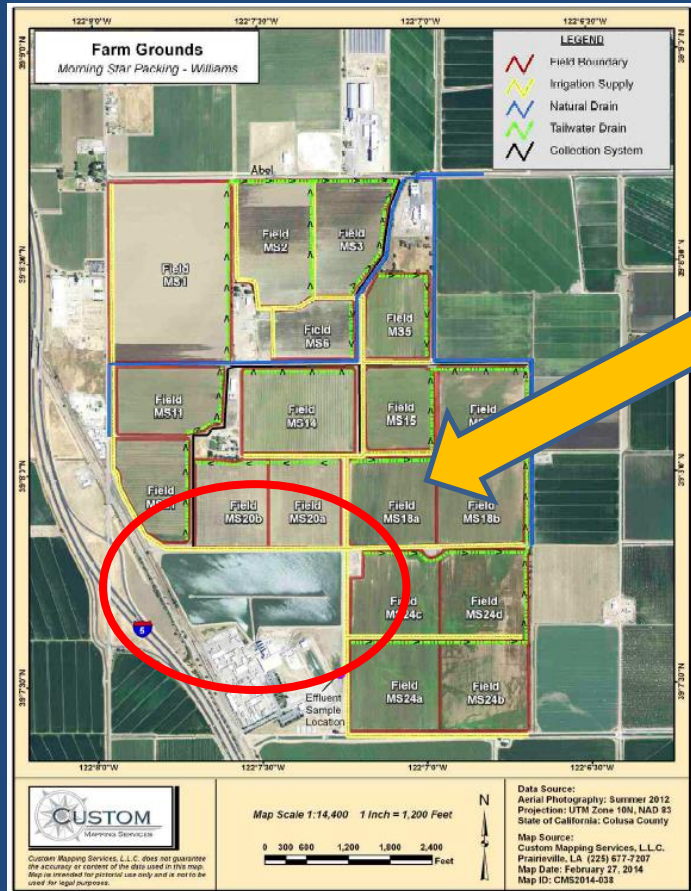
Company

- “World’s leading tomato ingredient processor”
- Three tomato processing plants plus trucking and farming companies
- 25% of California tomato production
- Manufactures 40% of US tomato paste

Williams Facility

- Largest in California
- June-October processing season, operate 24/7
- In 2015, increased production by 65% and changed wastewater system
- Violated permit
- Unauthorized discharge to groundwater

20 August 2015 Inspection



Expansion
of the
Cooling
Pond



June 2015 monitoring report
60 acres

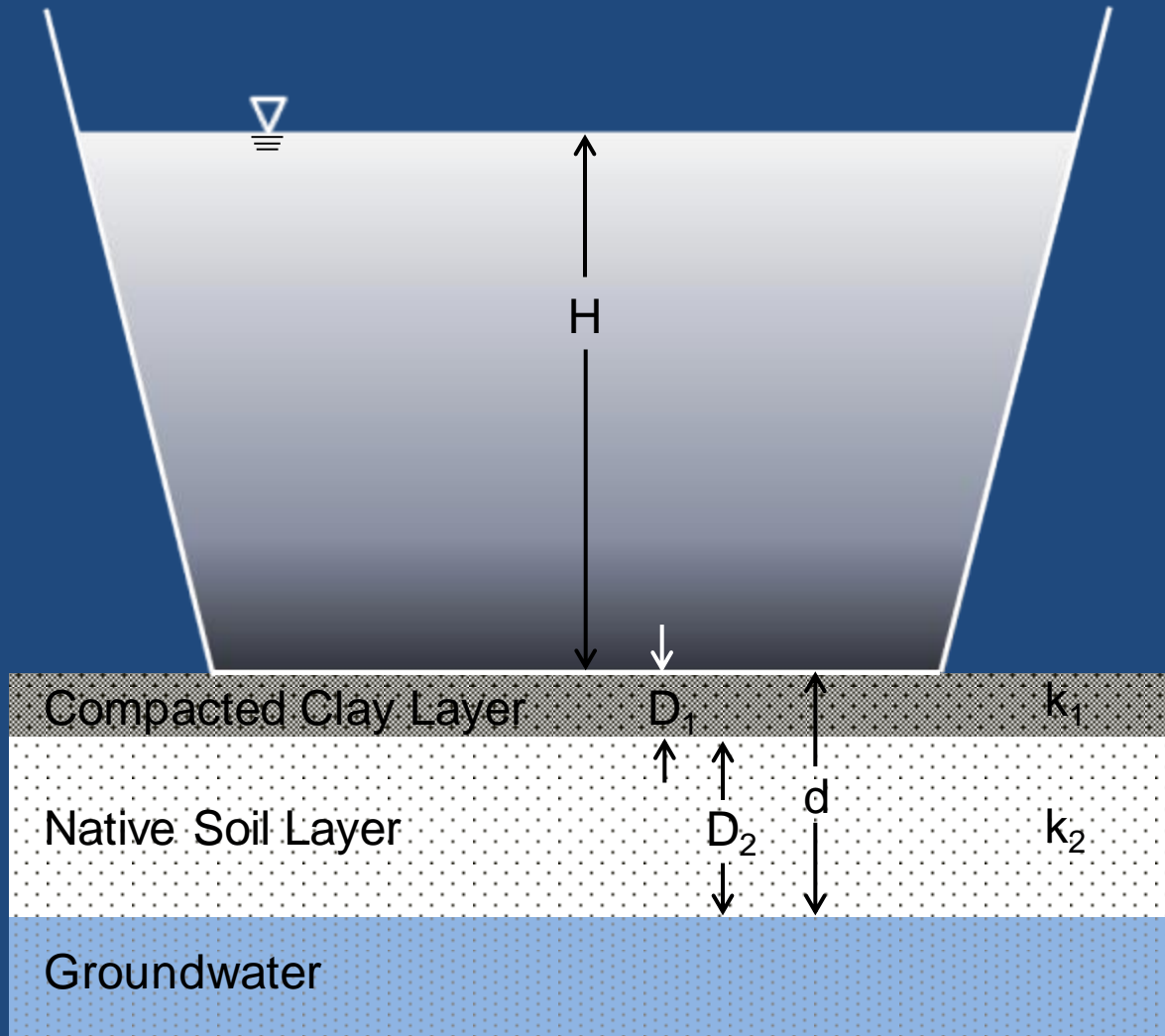
July 2015 monitoring report
100 acres

Increased discharge of wastewater to groundwater



Staff calculated seepage from expanded portion of pond

Cooling Pond Seepage Calculations



A = 40 acres

d = 5 ft depth from bottom of pond to groundwater

D₁ = 1 ft of compacted clay

k₁ = 1×10^{-6} cm/sec

D₂ = 4 ft of uncompacted silty clay

k₂ = 1×10^{-5} cm/sec

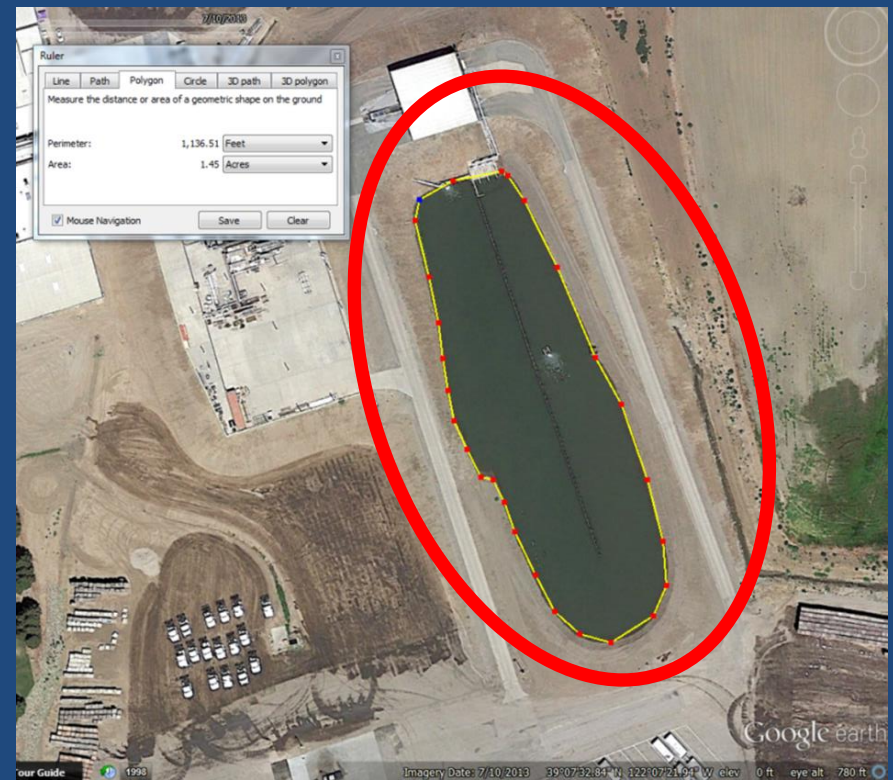
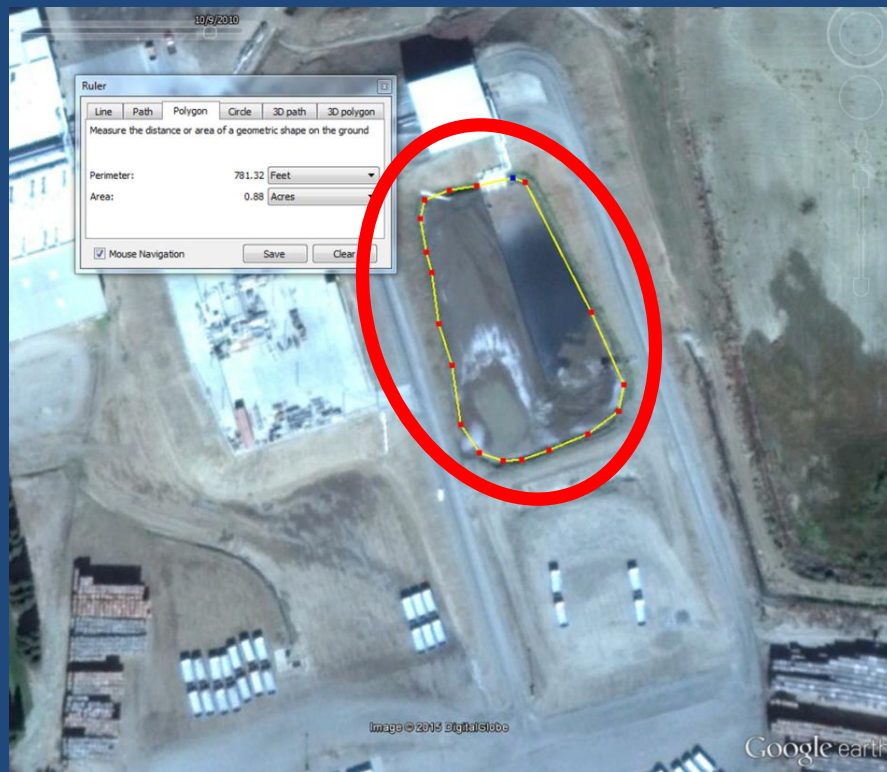
H = 5.6 ft of wastewater

Discharge from unpermitted portion of pond is approx. 276,300 gal/day

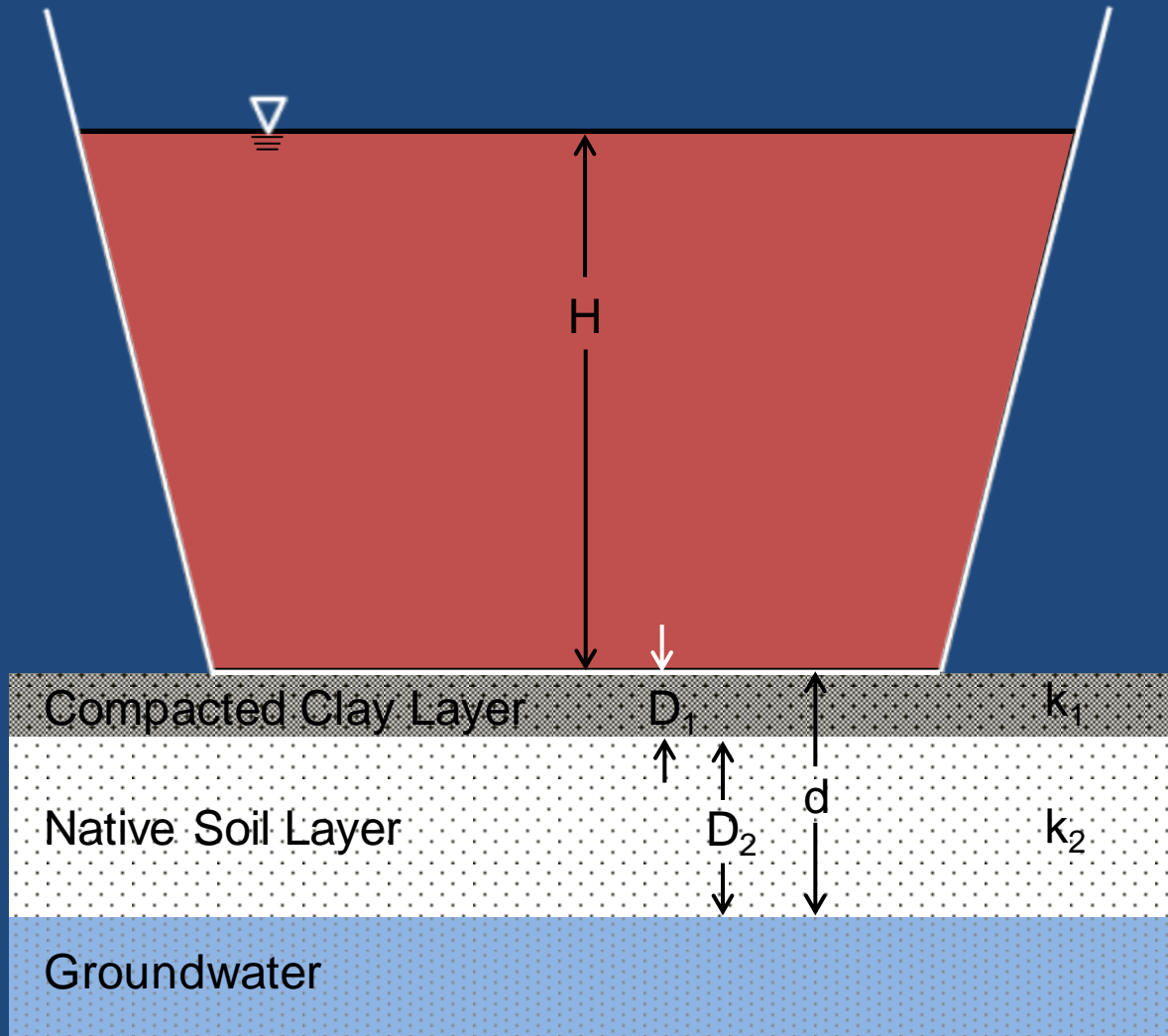
Non-Permitted Expansion of the Settling Pond

2 October 2009

10 July 2013



Settling Pond Seepage Calculations



Same calculation procedure as for Cooling Pond

Discharge from unpermitted portion of pond is approx. 3,672 gal/day

ACL Complaint

- Violated WDRs:
 - Discharged waste in a manner different than in WDRs
 - Made material changes without a RWD
- Water Code section 13350
 - Assess liability when discharge of waste to groundwater
 - Penalty on a per-gallon basis or per-day basis.
 - Recommend per-gallon penalty
 - Cooling Pond: 276,300 gal/day for 92 days
 - Settling Pond: 3,672 gal/day for 348 days
 - 26 million gallons discharged

ACL Complaint

- Maximum penalty is \$266 million
- Minimum penalty is stipulated economic benefit of \$205,577 plus 10%, or \$226,135
- Penalty calculation: \$14.8 million
- ACLC issued for \$1.5 million
- Morning Star proposes \$0

1. Did MS Violate its WDRs?

Violation #1: Expand Cooling Pond, Reduce Cropland

- MS says WDRs “contemplated” expansion in Finding 28

Finding 28

28. The Discharger plans to increase production by up to 65 percent in the future and states that the planned expansion is not expected to change wastewater character or cause exceedance of the wastewater flow limits of this Order (which are the same as those in WDRs Order 95-160). The flow limits of this Order allow the discharge of up to 422 MG of process wastewater combined with Cooling Pond water each year. For 695 acres of land application areas, this is equivalent to approximately 22 inches of water over four months from July through October. Average reference evapotranspiration (ET^0) rates in the Williams area for that period are typically 24 inches. Although the crop evapotranspiration rates will typically be less than ET^0 , the inherent inefficiency of border check irrigation requires some over application of water to ensure good crop yield. Although increases in wastewater flows up to the flow limits of this Order would likely not lead to gross over irrigation of the LAA fields, those flow increases will be accompanied by increased BOD and total nitrogen mass loadings. If wastewater flows increase to the flow limits of this Order, it is possible that the Discharger will not be able to comply with the loading rate limits of this Order without eliminating the cattle grazing, eliminating land application of residual solids, and/or implementing wastewater treatment to reduce BOD and/or total nitrogen loading rates.

1. Did MS Violate its WDRs?

Violation #1: Expand Cooling Pond, Reduce Cropland

- Not reasonable to assume that one sentence allows Cooling Pond expansion and cropland reduction
- Expanding production does not mean that wastewater system will expand
- Could have added cooling tower
- Finding 28 reference 695 acres, need careful application to mitigate groundwater pollution
- Groundwater protection limits adequate?

1. Did MS Violate its WDRs?

Violation #1: Expand Cooling Pond, Reduce Cropland

- Lani's testimony: WDRs based on info provided by discharger. MS never mentioned pond expansion or cropland removal.
- MS planned expansion in 2012 – same time that Lani was working on permit update
- MS position unreasonable. RWD did not describe changes. Anti-degradation analysis not valid because it doesn't consider impacts due to new wastewater system.

1. Did MS Violate its WDRs?

Violation #2: Expansion of Settling Pond

- MS: technical oversight; Board staff at fault
 - Pond expanded in 2012, same time as when WDR update began. Could have been included.
 - Lani's testimony: MS never mentioned expansion or say that tentative WDRs inaccurate
 - Accurate description is the foundation of a permit
- MS is a sophisticated company and should have known that its plans for major modifications had to be communicated and approved by Board

2. What is an Appropriate Penalty?

Factor	Prosecution	Discharger
Potential for Harm	3	0
Chemical characteristics	2	0
Cleanup	0	0
Deviation from requirement	Major	minor
High volume discount?	Yes (\$2/gal)	
Per day penalty	None	
Culpability	1.4	0
Cleanup/Cooperation	1.2	0
History of Violations	1.1	
Penalty Amount	\$14,801,069 →	\$0
	\$1,500,000	

Potential for Harm to Beneficial Uses

- Impacts to groundwater
 - Expand Cooling Pond
 - Reduce cropland
 - Expand Settling Pond
- Score from 0 to 5
- 3 (moderate) definition: “...*impacts are observed or reasonably expected...likely to attenuate without appreciable acute or chronic effects*”
- Potential for harm: demonstration not required

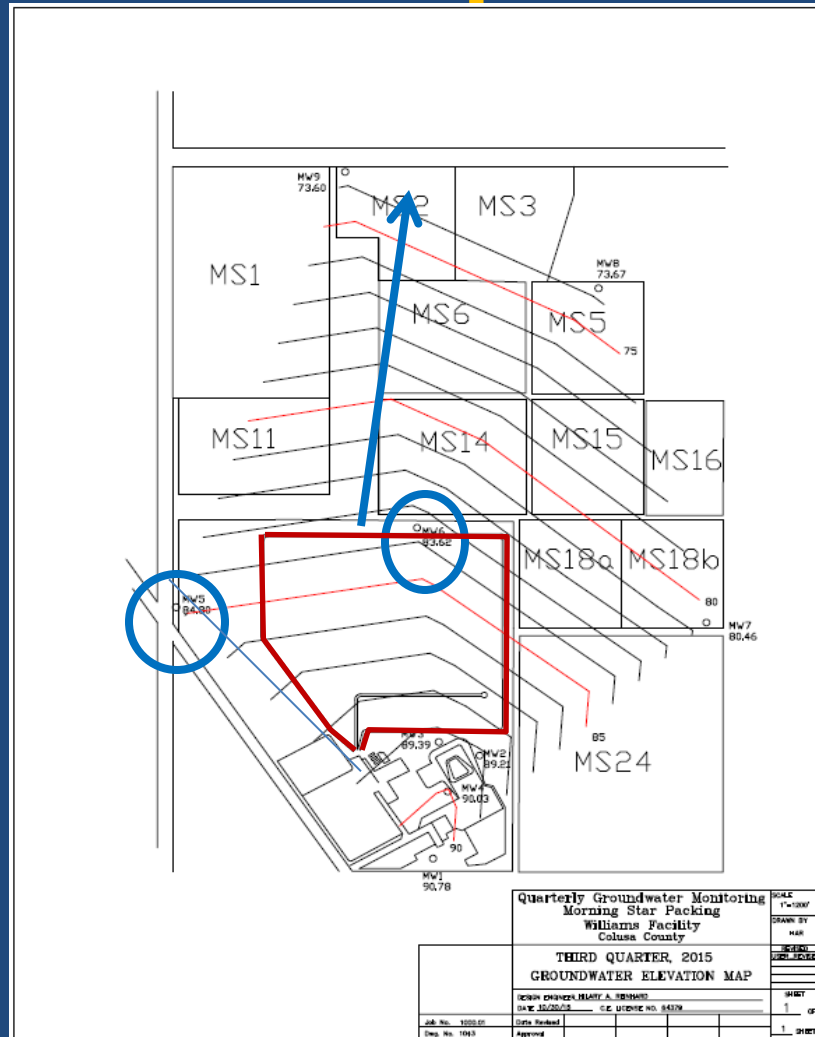


Potential for Harm to Beneficial Uses: Expand Cooling Pond



- Groundwater 2-3' below pond
 - High salinity waste
 - Tomato waste, not monitored
 - Pond has low DO which indicates organic waste
 - Iron, manganese
- **Moderate:** minimal separation; salinity, organic load; potential for iron, manganese degradation

Potential for Harm to Beneficial Uses: Expand Cooling Pond



- MS says no impact from expansion
 - No background well
 - Didn't evaluate metals
 - Two monitoring events
 - MS: pond water better than wastewater
 - Crops remove waste; no treatment from pond
- Mod. potential for harm

Potential for Harm to Beneficial Uses:

Reduce Cropland

- WDRs say 695 acres, but only 485 available now. WDR limits based on 695 acres. Still protective?
- Crops treat wastewater. Overloading of BOD has caused manganese pollution.
- Groundwater still polluted with manganese
- 2015: water conservation caused increased BOD in wastewater (3x higher than 2014). Applied to less land than described in permit.

→ Moderate potential harm to groundwater

Potential for Harm to Beneficial Uses: Expand Settling Pond

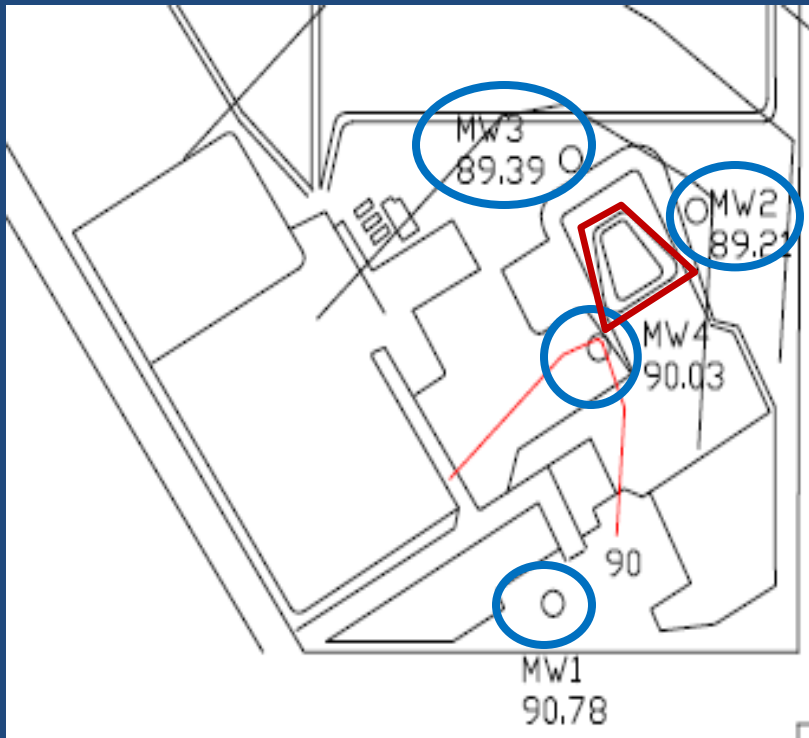
- Volume increased from 5 ac-feet to 10 ac-feet

	2011	2015
BOD, mg/L	241	1,796
FDS, mg/L (salt)	607	934



- Potential to harm groundwater from doubling of seepage and increased strength of waste
- Anti-degradation analysis based on smaller pond, lower strength waste. No longer accurate.

Potential for Harm to Beneficial Uses: Expand Settling Pond



- MS: no evidence of impact
- Did not look at metals
- Did not show a clear trend except for increasing chloride
- PT found Increasing nitrate
→ Moderate harm: higher strength waste, increasing chloride and nitrate, potential anoxic conditions

Deviation from Requirement

- Extent to which violation deviates from the specific requirement. Minor, moderate, or major.
- MS: a misunderstanding; minor
- MS completely ignored requirement to submit ROWD before making changes; discharging waste in manner not described
- If Findings aren't accurate, then anti-degradation analysis isn't accurate, and WDRs may not protect water quality
- Major deviation

Volume Discharged from Ponds

- MS: volume overestimated, forgot mounding
- MS did not calculate their own seepage
- We made conservative assumptions, resulting in a low seepage rate
- Monitoring wells show no evidence of mounding
- Our calculations are a reasonable estimate

Culpability

- Factor between 0.75 and 1.5
- Morning Star:
 - No factor warranted
- Prosecution Team:
 - Failed to contact staff
 - 2012: WDR update, SP expanded, plan for CP expansion
 - Fully aware of Board's permitting process
 - Showed a complete disregard for regulatory process prior to making material changes
- Factor of 1.4



Cleanup and Cooperation

- Voluntary cooperation in returning to compliance. Factor of 0.75 to 1.5.
- Morning Star: no multiplier; they're cooperative
- Prosecution Team:
 - 1.2 factor
 - MS response to NOV: no changes needed
 - At minimum, MS should submit a RWD



Ability to Pay and Penalty Amount

- Ability to Pay
 - not a concern: MS has stipulated it can pay \$1.5 million
- Penalty Amount
 - Calculated is \$14.8 million
 - Proposed penalty is \$1.5 million
 - Even if penalty calculation factors reduced, calculated penalty would be more than the proposed penalty

Summary

- Morning Star could have:
 - notified staff of proposed changes in 2012
 - submitted RWD prior to Cooling Pond expansion
 - avoided violations by installing treatment systems
- MS fully liable; resulted in discharge to groundwater
- WDRs based on accurate description. If not, may not protect water quality.
- Discourage other dischargers from making material changes without submitting RWD

Recommendation

Adopt the ACL Order
in the amount of \$1,500,000

Late revision:

Stipulated economic benefit is \$205,577

Minimum liability is \$226,135

Extra Slides

Per-day Liability Calculation

- Used same factors as per-gallon penalty
- Cooling Pond: 92 days, Settling Pond: 348 days
- Potential for Harm: 3
- Extent of Deviation: major
- Culpability: 1.4, Cleanup/Cooperation: 1.2, History of Violations: 1.1

→ Per-day liability \$609,840

→ Per-gallon liability \$14 million